

AMENDMENT(S) TO THE CLAIMS

1. (Canceled)

2. (Previously Presented) An interface device for attaching a printhead carrier to a carrier drive belt, comprising:

a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being
5 configured to provide directionally dependent filtering of vibrations propagating to said printhead carrier, said isolator providing a first dampening of vibration when said printhead carrier is moved in a first direction and providing a second dampening of vibration different from said first dampening of vibration when said printhead carrier is transported in a second direction opposite to said first direction.

3. (Original) The interface device of claim 2, said isolator being configured as an asymmetrical isolator comprising:

a main body having a centerline; and

a supplemental dampening body extending from said main body such that said
5 asymmetrical isolator is asymmetrical with respect to said centerline of said main body.

4. (Original) The interface device of claim 3, said first direction being in a direction toward a carrier motor and said second direction being a direction away from said carrier motor, said supplemental dampening body being positioned from said centerline of said main body in said direction toward said carrier motor.

5. (Original) The interface device of claim 3, said asymmetrical isolator being formed from an elastomeric material as a unitary structure.

6. (Original) The interface device of claim 3, further comprising a slot extending through said main body along said centerline, said slot being sized to snugly receive a portion of said belt holder.

7. (Original) The interface device of claim 6, said belt holder being formed from plastic.

8. (Original) The interface device of claim 6, said belt holder comprising:

a shank having a proximal end and a distal end;

a head portion attached to said proximal end of said shank, said head portion defining a first inwardly facing retention surface, said head portion providing attachment to said carrier drive
5 belt; and

a nose portion attached to said distal end of said shank, said nose portion defining a second inwardly facing retention surface.

said main body being placed in a state of compression between said first inwardly facing retention surface and said second inwardly facing retention surface.

9. (Original) The interface device of claim 3, said printhead carrier defining a receptacle for receiving said asymmetrical isolator, said receptacle defining a first primary thrust wall and a second primary thrust wall spaced apart from said first primary thrust wall, said asymmetrical isolator having a first end surface located at said main body and a second end surface located at
5 said supplemental dampening body, said first end surface engaging said first primary thrust wall and said second end surface engaging said second primary thrust wall.

10. (Original) The interface device of claim 9, said supplemental dampening body being in the form of a wing.

11. (Original) The interface device of claim 9, said first direction being in a direction toward a carrier motor and said second direction being a direction away from said carrier motor, said supplemental dampening body being positioned from said centerline of said main body in said direction toward said carrier motor.

12. (Original) The interface device of claim 9, said receptacle further defining a secondary thrust wall, said supplemental dampening body having a side surface that engages said secondary thrust wall.

13. (Currently Amended) ~~The interface device of claim 4~~ An interface device for attaching a printhead carrier to a carrier drive belt, comprising:

a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being configured to provide directionally dependent filtering along a main scan direction of said printhead carrier of vibrations propagating to said printhead carrier,

said isolator being an asymmetrical isolator and said printhead carrier defining a receptacle for receiving said asymmetrical isolator, said printhead carrier having a latch for engaging a latch slot formed in said asymmetrical isolator to retain said asymmetrical isolator in said receptacle.

14. (Canceled)

15. (Currently Amended) ~~The interface device of claim 4~~ An interface device for attaching a printhead carrier to a carrier drive belt, comprising:

a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being configured to provide directionally dependent filtering along a main scan direction of said printhead carrier of vibrations propagating to said printhead carrier,

said isolator being made from multiple materials having different stiffness properties.

16. (Currently Amended) ~~The interface device of claim 4~~ An interface device for attaching a printhead carrier to a carrier drive belt, comprising:

a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being
5 configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier,
said isolator being made from a single material having multiple stiffness properties.

17. (Original) The interface device of claim 16, said isolator being made from an elastomeric material having at least one of a different amount of hardener, additives, air bubbles and holes located in a portion of said isolator.

18. (Canceled)

19. (Currently Amended) ~~The method of claim 18~~ A method for attaching a printhead
carrier to a carrier drive belt, comprising:
providing a belt holder attached to said carrier drive belt; and
coupling an isolator between said belt holder and said printhead carrier, said isolator
5 being configured to provide directionally dependent filtering along a main scan direction of
said printhead carrier of vibrations propagating to said printhead carrier,

said isolator performing the steps of:

providing a first dampening of vibration when said printhead carrier is moved
in a first direction; and

10 providing a second dampening of vibration different from said first dampening
of vibration when said printhead carrier is transported in a second direction opposite to
said first direction.

20. (Currently Amended) ~~The method of claim 18~~ A method for attaching a printhead
carrier to a carrier drive belt, comprising:
providing a belt holder attached to said carrier drive belt; and

- coupling an isolator between said belt holder and said printhead carrier, said isolator
5 being configured to provide directionally dependent filtering along a main scan direction of
said printhead carrier of vibrations propagating to said printhead carrier,
wherein said isolator has an asymmetrical configuration.

21. (Canceled)

22. (Currently Amended) ~~The method of claim 18~~ A method for attaching a printhead
carrier to a carrier drive belt, comprising:
providing a belt holder attached to said carrier drive belt; and
coupling an isolator between said belt holder and said printhead carrier, said isolator being
5 configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier,
said isolator being made from multiple materials having different stiffness properties.

23. (Currently Amended) ~~The method of claim 18~~ A method for attaching a printhead
carrier to a carrier drive belt, comprising:
providing a belt holder attached to said carrier drive belt; and
coupling an isolator between said belt holder and said printhead carrier, said isolator being
5 configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier,
said isolator being made from a single material having multiple stiffness properties.

24. (Canceled)

25. (Previously Presented) An imaging apparatus, comprising,
a printhead carrier;
a carrier drive belt;
a belt holder attached to said carrier drive belt; and

5 an isolator coupled between said belt holder and said printhead carrier, said isolator
being configured to provide directionally dependent filtering of vibrations propagating to said
printhead carrier, said isolator providing a first dampening of vibration when said printhead
carrier is moved in a first direction and providing a second dampening of vibration different
from said first dampening of vibration when said printhead carrier is transported in a second
10 direction opposite to said first direction.

26. (Original) The imaging apparatus of claim 25, said isolator being configured as an
asymmetrical isolator, comprising:

a main body having a centerline; and

a supplemental dampening body extending from said main body such that said
5 asymmetrical isolator is asymmetrical with respect to said centerline of said main body.

27. (Original) The imaging apparatus of claim 26, said first direction being in a direction
toward a carrier motor and said second direction being a direction away from said carrier motor,
said supplemental dampening body being positioned from said centerline of said main body in
said direction toward said carrier motor.

28. (Original) The imaging apparatus of claim 26, said asymmetrical isolator being
formed from an elastomeric material as a unitary structure.

29. (Original) The imaging apparatus of claim 26, further comprising a slot extending
through said main body along said centerline, said slot being sized to snugly receive a portion of
said belt holder.

30. (Original) The imaging apparatus of claim 29, said belt holder being formed from
plastic.

31. (Original) The imaging apparatus of claim 29, said belt holder comprising:

a shank having a proximal end and a distal end;

a head portion attached to said proximal end of said shank, said head portion defining a first inwardly facing retention surface, said head portion providing attachment to said carrier drive
5 belt; and

a nose portion attached to said distal end of said shank, said nose portion defining a second inwardly facing retention surface.

said main body being placed in a state of compression between said first inwardly facing retention surface and said second inwardly facing retention surface.

32. (Original) The imaging apparatus of claim 26, said printhead carrier defining a receptacle for receiving said asymmetrical isolator, said receptacle defining a first primary thrust wall and a second primary thrust wall spaced apart from said first primary thrust wall, said asymmetrical isolator having a first end surface located at said main body and a second end
5 surface located at said supplemental dampening body, said first end surface engaging said first primary thrust wall and said second end surface engaging said second primary thrust wall.

33. (Original) The imaging apparatus of claim 32, said supplemental dampening body being in the form of a wing.

34. (Original) The imaging apparatus of claim 32, said first direction being in a direction toward a carrier motor and said second direction being a direction away from said carrier motor, said supplemental dampening body being positioned from said centerline of said main body in said direction toward said carrier motor.

35. (Original) The imaging apparatus of claim 32, said receptacle further defining a secondary thrust wall, said supplemental dampening body having a side surface that engages said secondary thrust wall.

36. (Currently Amended) ~~The imaging apparatus of claim 24~~ An imaging apparatus,
comprising,

a printhead carrier;

a carrier drive belt;

5 a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being
configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier.

said isolator being an asymmetrical isolator and said printhead carrier defining a
10 receptacle for receiving said asymmetrical isolator, said printhead carrier having a latch for
engaging a latch slot formed in said asymmetrical isolator to retain said asymmetrical isolator in
said receptacle.

37. (Canceled)

38. (Currently Amended) ~~The imaging apparatus of claim 24~~ An imaging apparatus,
comprising,

a printhead carrier;

a carrier drive belt;

5 a belt holder attached to said carrier drive belt; and

an isolator coupled between said belt holder and said printhead carrier, said isolator being
configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier.

said isolator being made from multiple materials having different stiffness properties.
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39. (Currently Amended) ~~The imaging apparatus of claim 24~~ An imaging apparatus,
comprising,

a printhead carrier;

a carrier drive belt;

5 a belt holder attached to said carrier drive belt; and
an isolator coupled between said belt holder and said printhead carrier, said isolator being
configured to provide directionally dependent filtering along a main scan direction of said
printhead carrier of vibrations propagating to said printhead carrier,

said isolator being made from a single material having multiple stiffness properties.

10 40. (Original) The imaging apparatus of claim 39, said isolator being made from an elastomeric material having at least one of a different amount of hardener, additives, air bubbles and holes located in a portion of said isolator.

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Currently Amended) ~~The imaging apparatus of claim 41~~ An imaging apparatus,
comprising,

a carrier drive belt;

a belt holder attached to said carrier drive belt;

an isolator coupled to said belt holder; and

a printhead carrier having a receptacle configured for mounting said isolator, said
receptacle having a first thrust wall and a second thrust wall spaced apart from said first thrust
wall along a bi-directional main scan direction of said printhead carrier, said isolator being
retained between and in engagement with said first thrust wall and said second thrust wall,
wherein a structural geometry of said second thrust wall is different than a structural geometry of
said first thrust wall to adjust an amount of dampening in each direction along said bi-directional
main scan direction to provide directionally dependent filtering of vibrations propagating to said
printhead carrier,

said isolator being asymmetrical.